



Mr. Mark Verhey
Humboldt County Health Department
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

June 19, 2006

Re: Second Quarter 2006 Groundwater Monitoring Report
Former Cash Oil Fortuna
409 South Fortuna Boulevard, Fortuna, CA
HCDEH LOP No. 12652
Blue Rock Project No. NC-004

Dear Mr. Verhey,

This report presents the results of the Second Quarter 2006 groundwater monitoring activities at 409 South Fortuna Boulevard, Fortuna, Humboldt County, California (site) (Figure 1), and was prepared for Clyde Harvey by Blue Rock Environmental, Inc. (Blue Rock).

Background

Site Description

The former Cash Oil Service Station is located on the corner of South Fortuna Boulevard and Newburg Road in Fortuna, California. The site is located in an area of low topographic relief and is considered part of the Eel River flood plain (Figure 1). The site formerly contained one single-story building with four pump islands that were used to dispense unleaded gasoline from four fiberglass lined, single walled steel 10,000-gallon underground storage tanks (UST), three in Complex #1 and one in Complex #2 (Figure 2).

Site History

On May 8, 1997, as part of a UST system upgrade, Clearwater Group (Clearwater) observed Tank Liners Inc. drill three soil borings B-1, B-2, and B-3 for collection of soil and groundwater samples as required by the HCDEH (Figure 2). Laboratory analytical results from the soil and groundwater samples indicated that an unauthorized release of petroleum had occurred from the UST system.

In May 2000, Cash Oil Company sold the property and upgraded UST system to Golden Gate Petroleum of Martinez, California.

In August 2004, Beacom Construction (Beacom) of Fortuna, California, on behalf of Golden Gate Petroleum, removed the (4) 10,000-gallon USTs and associated fuel dispensers from the site. The site is being redeveloped as a commercial property.

Site Investigation History

Subsurface investigation activities have been ongoing at the site since 2000. A total of approximately 15 soil borings (B-1 through B-12, and HP-9 through HP-11) have been drilled and eighteen monitoring wells (MW-1 through MW-8 and MW-9A/B through MW-13A/B) have been installed at the site (Figure 2). Groundwater monitoring has been ongoing since the wells were installed. Monitoring well construction data are summarized on Table 1 and groundwater sample data are summarized on Table 2.

Summary of Chemical Type

The predominant chemical types that have been detected in the subsurface include total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and the fuel oxygenates MTBE, TBA, ETBE, and TAME.

Summary of Hydrogeology

The first couple feet below grade consists of baserock fill. The site is underlain by sediments characterized as elastic clayey silt (MH) from a depth of ~2 to ~17 feet bgs, which is underlain by gravel (GW/GM) with a lesser amount of sand (SW/SM) to a depth of ~20 feet bgs (the maximum depth explored).

There appears to be a perched water bearing zone located within the elastic clayey silt (MH) at a general depth interval of 4 to 10 feet bgs, referred to here as the A-Zone. This zone consists of fine-grained soil types, i.e. silt/clay. Stabilized water levels in the A-Zone wells have ranged from ~2.5 – 6.5 ft bgs; however, some have been dry during the summer and fall (coinciding with the dry season).

The gravel/sand (GW/SW) unit from a depth of ~17 to 20 feet bgs (and deeper) is referred to here as the B-Zone. B-Zone wells screened from 15 to 20 feet bgs have shown groundwater flow generally toward west and west-northwest. Stabilized water levels in the B-Zone wells have ranged from ~8 - 14 ft bgs, with the highest groundwater conditions appearing to occur in the winter and spring (coinciding with seasonal precipitation).

Potentiometric data from almost all of the other wells previously installed at the site (screened from 5 to 20 feet bgs) appear to fall within the pattern of data from the B-Zone, except MW-7, which appears to be more consistent with the A-Zone data.

Summary of Remedial Efforts

In August 2004, Blue Rock supervised Van Meter Construction of Redway, California excavate 2,034 tons of petroleum impacted soil from the vicinity of the former UST fuel system. The lateral extent of the excavation is shown on Figure 2, and the depth of the excavation was irregular, ranging from approximately 6 to 18 feet bgs. The remedial soil excavation removed an estimated 2,109 pounds (346 gallons) of hydrocarbons from the site. Blue Rock mixed approximately 750 pounds of ORC into the excavation backfill. Monitoring well MW-3 was destroyed during remedial excavation activities. Remedial activities are presented in Blue Rock's *Remedial Report of Findings*, dated September 1, 2004.

Field and Laboratory Activities

Groundwater Monitoring Activities

On March 21, 2006, all 11 projects wells (MW-9A&B through MW-13A&B) and MW-16 (Fortuna Beacon - Humboldt Petroleum) were gauged for depth to water, and sampled. MW-11A and MW-12A could not be sampled because they were dry.

Prior to sampling, an electronic water level indicator was used to gauge depth to water in each well, accurate to within ± 0.01 -foot. All wells were checked for the presence of light non-aqueous phase liquid (LNAPL) petroleum prior to purging. No measurable thicknesses of LNAPL were observed on groundwater in any of the wells.

In preparation for sampling, the wells were purged of groundwater until sampling parameters (temperature, pH, and conductivity) stabilized. Dissolved oxygen levels were also measured.

Following recovery of water levels to approximately 80% of their static levels, groundwater samples were collected from the wells using disposable polyethylene bailers and transferred to laboratory supplied containers. Sample containers were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Purging instruments were cleaned between use by an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Purge and rinseate water was stored on-site in labeled 55-gallon drums pending future removal and disposal.

Groundwater monitoring and well purging information is presented on Gauge Data/Purge Calculations and Purge Data sheets (attached).

Groundwater Sample Analyses

Groundwater samples were analyzed by Kiff Analytical (Kiff), a DHS-certified laboratory, located in Davis, California, for the following analytes:

- TPHg, BTEX, and MTBE by EPA Method 5030/8260B.

Groundwater Monitoring Results

Groundwater Flow Direction and Gradient

On June 6, 2006, static groundwater in the A-Zone wells was present in the wells at depths ranging from approximately 3.59 (MW-10A) to Dry (MW-11A, MW-12A) feet bgs. The depth to water in MW-11A and MW-12A (>10 ft bgs) was not consistent with the other A-Zone wells (i.e. ~3.5-6 ft bgs). Gauging data, combined with well elevation data, were used to calculate groundwater elevations. Resulting groundwater elevations in A-Zone wells this quarter did not form a discernable pattern suitable for contouring (Figure 3a).

On June 6, 2006, static groundwater in the B-Zone wells was present in the wells at depths ranging from approximately 10.31 (MW-12B) to 12.00 (MW-13B) feet bgs. Gauging data, combined with well elevation data, were used to calculate groundwater elevations, and to generate a groundwater elevation and gradient map. Groundwater flow direction in the B-Zone was calculated to be toward the west at a gradient of 0.01 ft/ft (Figure 3b).

The groundwater levels between the well pairs were also evaluated for potential vertical gradients between the A-Zone and B-Zone. The table below summarizes June 6, 2006 data:

| Nested Well Pair | A-Zone Groundwater Elevation (Ft MSL) | B-Zone Groundwater Elevation (Ft MSL) | Vertical Distance Between A and B Zones Mid-point of Screen (ft) | Calculated Vertical Gradient |
|------------------|---------------------------------------|---------------------------------------|--|------------------------------|
| MW-9A & MW-9B | 52.43 | 46.84 | 10.5 | 0.53 ft/ft down |
| MW-10A & MW-10B | 54.93 | 47.39 | 10.5 | 0.72 ft/ft down |
| MW-11A & MW-11B | Dry | 47.48 | 10.5 | NA |
| MW-12A & MW-12B | Dry | 47.91 | 10.5 | NA |
| MW-13A & MW-13B | 54.91 | 46.62 | 10.5 | 0.79 ft/ft down |

These results primarily show a potential downward flow direction between the A-Zone and the B-Zone.

Groundwater Sample Analytical Results A-Zone

| | |
|------------------------|---|
| LNAPL: | None |
| TPHg concentration: | <50 µg/L (MW-9A, MW-10A, MW-13A) |
| Benzene concentration: | <0.50 µg/L (MW-10A, MW-13A) to 9.4 µg/L (MW-9A) |
| MTBE Concentration: | <0.50 µg/L (MW-10A) to 34 µg/L (MW-9A) |
| Dissolved Oxygen: | 2.34 mg/L (MW-9A), 1.73 mg/L (MW-10A), 0.51 mg/L (MW-13A) |

Groundwater Sample Analytical Results B-Zone

| | |
|------------------------|--|
| LNAPL: | None |
| TPHg concentration: | <50 µg/L (MW-10B,11B,12B,13B, MW-16) to <200 µg/L (MW-9B) |
| Benzene concentration: | <0.50 µg/L (MW-10B,11B,12B,13B, MW-16) to <2 µg/L (MW-9B) |
| MTBE Concentration: | 2.4 µg/L (MW-10B) to 840 µg/L (MW-9B) |
| Dissolved Oxygen: | 3.50 mg/L (MW-9B), 2.75 mg/L (MW-10B), 0.76 mg/L (MW-11B), 0.90 mg/L (MW-12B), 0.91 mg/L (MW-13B) |

Groundwater sample analytical results are shown graphically on Figures 4a and 4b. Cumulative groundwater sample analytical results are summarized in Table 2, and intrinsic bioremediation data are summarized in Table 3. Copies of the laboratory report and chain-of-custody form are attached.

Remarks

Groundwater sample analytical results fall within historical concentration range for the site and appear to be decreasing.

Project Status

- The site is currently being monitored on a quarterly basis per the HCDEH directives. The next quarterly sampling event is scheduled for September 2006. Groundwater samples will be analyzed for TPHg, BTEX, and MTBE.

Certification

This report was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

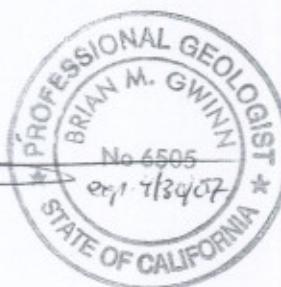


Scott Ferriman
Project Scientist

Reviewed by:



Brian Gwinn, PG
Principal Geologist



Attachments:

- Table 1: Well Construction Details
- Table 2: Groundwater Elevations and Analytical Data
- Table 3: Intrinsic Bioremediation Data
- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3a: Groundwater Elevation Map – A-Zone– June 6, 2006
- Figure 3b: Groundwater Elevation Map – B-Zone– June 6, 2006
- Figure 4a: Groundwater Analytical Map – A-Zone – June 6, 2006
- Figure 4b: Groundwater Analytical Map – B-Zone – June 6, 2006
- Blue Rock Gauge/Purge Calculations and Well Purging Data field sheets
- Laboratory Analytical Report and Chain-of-Custody Form

Distribution:

- Mr. Clyde Harvey, 1785 Fort Douglas Circle, Salt Lake City, UT 84103
- Mr. Dennis O'Keefe, Golden Gate Petroleum, 501 Shell Avenue, Martinez, CA 94553

Table 1
WELL CONSTRUCTION DETAILS
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project No. NC-004

| Monitoring Well Identification | Date Installed | Installed by | Casing Diameter (inches) | Total Depth (feet) | Blank Interval (feet) | Screened Interval (feet) | Slot Size (inches) | Filter Pack (feet) | Bentonite Seal (feet) | Cement Grout (feet) |
|--------------------------------|----------------|--------------|--------------------------|--------------------|-----------------------|--------------------------|--------------------|--------------------|-----------------------|---------------------|
| MW-1** | 1/10/01 | Clearwater | 2 | 20 | 0-5 | 5-20 | 0.02 | 4.5-20 | 3-4.5 | 0-3 |
| MW-2** | 1/11/01 | Clearwater | 2 | 15 | 0-5 | 5-15 | 0.02 | 4.5-15 | 3-4.5 | 0-3 |
| MW-3* | 1/10/01 | Clearwater | 2 | 20 | 0-5 | 5-20 | 0.02 | 4.5-20 | 3-4.5 | 0-3 |
| MW-4** | 1/11/01 | Clearwater | 2 | 20 | 0-5 | 5-20 | 0.02 | 4.5-20 | 3-4.5 | 0-3 |
| MW-5** | 3/2/02 | Clearwater | 2 | 20.5 | 0-5 | 5-20 | 0.02 | 4-20 | 3-4 | 0-3 |
| MW-6** | 3/2/02 | Clearwater | 2 | 20.5 | 0-5 | 5-20 | 0.02 | 4-20 | 3-4 | 0-3 |
| MW-7** | 3/2/02 | Clearwater | 2 | 20.5 | 0-5 | 5-20 | 0.02 | 4-20 | 3-4 | 0-3 |
| MW-8** | 6/11/02 | Clearwater | 2 | 20 | 0-5 | 5-20 | 0.02 | 4-20 | 3-4 | 0-3 |
| MW-9A | 8/17/05 | Blue Rock | 2 | 10 | 0-4 | 4-10 | 0.01 | 3-10 | 2-3 | 0-2 |
| MW-9B | 8/17/05 | Blue Rock | 2 | 20 | 0-15 | 15-20 | 0.01 | 14-20 | 13-14 | 0-13 |
| MW-10A | 8/17/05 | Blue Rock | 2 | 10 | 0-4 | 4-10 | 0.01 | 3-10 | 2-3 | 0-2 |
| MW-10B | 8/17/05 | Blue Rock | 2 | 20 | 0-15 | 15-20 | 0.01 | 14-20 | 13-14 | 0-13 |
| MW-11A | 8/17/05 | Blue Rock | 2 | 10 | 0-4 | 4-10 | 0.01 | 3-10 | 2-3 | 0-2 |
| MW-11B | 8/17/05 | Blue Rock | 2 | 20 | 0-15 | 15-20 | 0.01 | 14-20 | 13-14 | 0-13 |
| MW-12A | 3/15/06 | Blue Rock | 2 | 10 | 0-4 | 4-10 | 0.01 | 3-10 | 2-3 | 0-2 |
| MW-12B | 3/15/06 | Blue Rock | 2 | 20 | 0-15 | 15-20 | 0.01 | 14-20 | 13-14 | 0-13 |
| MW-13A | 3/15/06 | Blue Rock | 2 | 10 | 0-4 | 4-10 | 0.01 | 3-10 | 2-3 | 0-2 |
| MW-13B | 3/15/06 | Blue Rock | 2 | 20 | 0-15 | 15-20 | 0.01 | 14-20 | 13-14 | 0-13 |

Associated Well Previously Installed On Behalf of HPI at 390 S. Fortuna Blvd, Fortuna, CA

| | | | | | | | | | | |
|-------------|---------|------------|---|----|------|-------|------|------|-----|-----|
| MW-16 (HPI) | 7/21/98 | Clearwater | 2 | 20 | 0-10 | 10-20 | 0.02 | 9-20 | 7-9 | 0-7 |
|-------------|---------|------------|---|----|------|-------|------|------|-----|-----|

*MW-3 was removed during remedial excavation activities in 8/04.

**Monitoring wells destroyed under permit on March 15, 2006.

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project No. NC-004

| Sample ID | Sample Date | TOC (feet) | DTW (feet) | SPH (feet) | GWE (feet) | TPHg (µg/L) | B (µg/L) | T (µg/L) | E (µg/L) | X (µg/L) | MTBE (µg/L) | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | Methanol (µg/L) | Ethanol (µg/L) |
|--|-------------|------------|------------|------------|------------|---------------------|----------|----------|----------|----------|-------------|------------|-------------|-------------|-------------|-----------------|----------------|
| <i>A-Zone (~4-10 ft bgs) Monitoring Well Groundwater Samples</i> | | | | | | | | | | | | | | | | | |
| MW-9A | 8/22/05 | 58.57 | -- | -- | -- | well dry, no sample | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Screen | 12/16/05 | 58.57 | 4.26 | 0.00 | 54.31 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.0 | -- | -- | -- | -- | -- | -- |
| 4' - 10' | 3/21/06 | 58.57 | 2.77 | 0.00 | 55.80 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.3 | -- | -- | -- | -- | -- | -- |
| | 6/6/06 | 58.57 | 6.14 | 0.00 | 52.43 | <50 | 9.4 | <0.5 | <0.5 | <0.5 | 34 | -- | -- | -- | -- | -- | -- |
| MW-10A | 8/22/05 | 58.52 | 4.53 | 0.00 | 53.99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| Screen | 12/16/05 | 58.52 | 3.28 | 0.00 | 55.24 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| 4' - 10' | 3/21/06 | 58.52 | 2.36 | 0.00 | 56.16 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 6/6/06 | 58.52 | 3.59 | 0.00 | 54.93 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| MW-11A | 8/22/05 | 58.18 | -- | -- | -- | well dry, no sample | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Screen | 12/16/05 | 58.18 | -- | -- | -- | well dry, no sample | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4' - 10' | 3/21/06 | 58.18 | 7.95 | 0.00 | 50.23 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.7 | -- | -- | -- | -- | -- | -- |
| | 6/6/06 | 58.18 | -- | -- | -- | well dry, no sample | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-12A | 3/21/06 | 58.25 | 3.82 | 0.00 | 54.43 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| Screen | 6/6/06 | 58.25 | -- | -- | -- | well dry, no sample | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4' - 10' | | | | | | | | | | | | | | | | | |
| MW-13A | 3/21/06 | 59.02 | 3.47 | 0.00 | 55.55 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.8 | -- | -- | -- | -- | -- | -- |
| Screen | 6/6/06 | 59.02 | 4.11 | 0.00 | 54.91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.1 | -- | -- | -- | -- | -- | -- |
| 4' - 10' | | | | | | | | | | | | | | | | | |
| <i>A-Zone (~4-10 ft bgs) Grab Groundwater Samples</i> | | | | | | | | | | | | | | | | | |
| B-4 | 3/14/00 | -- | -7 | 0.00 | -- | 210 | 4.1 | <0.5 | <0.5 | 0.79 | <0.5 | <10 | <1 | <1 | <1 | -- | -- |
| B-5 | 3/14/00 | -- | -5 | 0.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <1 | 0.79 | <10 | <1 | <1 | <1 | -- | -- |
| B-6 | 3/14/00 | -- | -4 | 0.00 | -- | 110 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <10 | <1 | <1 | <1 | -- | -- |
| B-7 | 3/14/00 | -- | -4 | 0.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <10 | <1 | <1 | <1 | -- | -- |
| B-8 | 3/14/00 | -- | -4 | 0.00 | -- | 19,000 | 18 | 2.4 | 20 | 3.8 | 1,100 | <100 | <5 | 12 | 91 | -- | -- |
| B-9 | 3/14/00 | -- | -4 | 0.00 | -- | 20,000 | 36 | 22 | 11 | <8 | 3,900 | <200 | <10 | <10 | 310 | -- | -- |
| B-10 | 3/14/00 | -- | -2.5 | 0.00 | -- | <63 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <13 | <1 | <1 | <1 | -- | -- |
| B-11 | 3/14/00 | -- | -4.5 | 0.00 | -- | 14,000 | 26 | 2.6 | 41 | 5 | 580 | <100 | <5 | <5 | 12 | -- | -- |

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project No. NC-004

| Sample ID | Sample Date | TOC (feet) | DTW (feet) | SPH (feet) | GWE (feet) | TPHg ($\mu\text{g/L}$) | B ($\mu\text{g/L}$) | T ($\mu\text{g/L}$) | E ($\mu\text{g/L}$) | X ($\mu\text{g/L}$) | MTBE ($\mu\text{g/L}$) | TBA ($\mu\text{g/L}$) | DIPE ($\mu\text{g/L}$) | ETBE ($\mu\text{g/L}$) | TAME ($\mu\text{g/L}$) | Methanol ($\mu\text{g/L}$) | Ethanol ($\mu\text{g/L}$) |
|---|-------------|------------|------------|------------|------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|------------------------------|-----------------------------|
| <u>B-Zone (~15-20 ft bgs) Monitoring Well Groundwater Samples</u> | | | | | | | | | | | | | | | | | |
| MW-9B | 8/22/05 | 58.54 | 14.28 | 0.00 | 44.26 | 220 | 1.6 | <1 | <1 | 1.0 | 860 | -- | -- | -- | -- | -- | |
| Screen | 12/16/05 | 58.54 | 13.39 | 0.00 | 45.15 | 120 | <1 | <1 | <1 | <1 | 1,000 | -- | -- | -- | -- | -- | |
| 15' - 20' | 3/21/06 | 58.54 | 10.10 | 0.00 | 48.44 | <200 | <2 | <2 | <2 | <2 | 920 | -- | -- | -- | -- | -- | |
| | 6/6/06 | 58.54 | 11.70 | 0.00 | 46.84 | <200 | <2 | <2 | <2 | <2 | 840 | -- | -- | -- | -- | -- | |
| MW-10B | 8/22/05 | 58.56 | 13.58 | 0.00 | 44.98 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.3 | -- | -- | -- | -- | -- | |
| Screen | 12/16/05 | 58.56 | 10.91 | 0.00 | 47.65 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.8 | -- | -- | -- | -- | -- | |
| 15' - 20' | 3/21/06 | 58.56 | 7.41 | 0.00 | 51.15 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.99 | -- | -- | -- | -- | -- | |
| | 6/6/06 | 58.56 | 11.17 | 0.00 | 47.39 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.4 | -- | -- | -- | -- | -- | |
| MW-11B | 8/22/05 | 58.39 | 13.14 | 0.00 | 45.25 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 160 | -- | -- | -- | -- | -- | |
| Screen | 12/16/05 | 58.39 | 10.85 | 0.00 | 47.54 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 180 | -- | -- | -- | -- | -- | |
| 15' - 20' | 3/21/06 | 58.39 | 7.31 | 0.00 | 51.08 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 120 | -- | -- | -- | -- | -- | |
| | 6/6/06 | 58.39 | 10.91 | 0.00 | 47.48 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 110 | -- | -- | -- | -- | -- | |
| MW-12B | 3/21/06 | 58.22 | 6.75 | 0.00 | 51.47 | 94 | <0.5 | <0.5 | 0.68 | 2.4 | 4.6 | -- | -- | -- | -- | -- | |
| Screen | 6/6/06 | 58.22 | 10.31 | 0.00 | 47.91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 4.4 | -- | -- | -- | -- | -- | |
| 15' - 20' | | | | | | | | | | | | | | | | | |
| MW-13B | 3/21/06 | 58.62 | 9.75 | 0.00 | 48.87 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 11 | -- | -- | -- | -- | -- | |
| Screen | 6/6/06 | 58.62 | 12.00 | 0.00 | 46.62 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 17 | -- | -- | -- | -- | -- | |
| 15' - 20' | | | | | | | | | | | | | | | | | |
| MW-16 | 6/20/02 | 57.54 | 12.79 | 0.00 | 44.75 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| (Humboldt Pet. Well) | 9/3/02 | 57.54 | 14.49 | 0.00 | 43.05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| Screen | 12/11/02 | 57.54 | 15.41 | 0.00 | 42.13 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10' - 20' | 3/7/03 | 57.54 | 10.90 | 0.00 | 46.64 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 6/3/03 | 57.54 | 10.76 | 0.00 | 46.78 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 9/2/03 | 57.54 | 14.24 | 0.00 | 43.30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12/3/03 | 57.54 | 14.71 | 0.00 | 42.83 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 3/9/04 | 57.54 | 10.32 | 0.00 | 47.22 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 6/8/04 | 57.54 | 12.33 | 0.00 | 45.21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 9/3/04 | 57.54 | 14.76 | 0.00 | 42.78 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12/8/04 | 57.54 | 13.27 | 0.00 | 44.27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 3/25/05 | 57.54 | 10.91 | 0.00 | 46.63 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 6/13/05 | 57.54 | 11.03 | 0.00 | 46.51 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 8/22/05 | 57.54 | 13.04 | 0.00 | 44.50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 57 | -- | -- | -- | -- | -- | |
| | 12/16/05 | 57.54 | 12.07 | 0.00 | 45.47 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 8.2 | -- | -- | -- | -- | -- | |
| | 3/21/06 | 57.54 | 8.81 | 0.00 | 48.73 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 4.2 | -- | -- | -- | -- | -- | |
| | 6/6/06 | 57.54 | 10.98 | 0.00 | 46.56 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 15 | -- | -- | -- | -- | -- | |
| <u>C-Zone (~35-40 ft bgs) Grab Groundwater Samples</u> | | | | | | | | | | | | | | | | | |
| HP-9 | 8/29/05 | -- | -40 | 0.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | |
| HP-10 | 8/29/05 | -- | -40 | 0.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | |
| HP-11 | 8/29/05 | -- | -40 | 0.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | |

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project No. NC-004

| Sample ID | Sample Date | TOC (feet) | DTW (feet) | SPH (feet) | GWE (feet) | TPHg (µg/L) | B (µg/L) | T (µg/L) | E (µg/L) | X (µg/L) | MTBE (µg/L) | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | Methanol (µg/L) | Ethanol (µg/L) | |
|---|-------------|--|------------|------------|------------|-------------|----------|----------|----------|----------|-------------|------------|-------------|-------------|-------------|-----------------|----------------|----|
| <i>Monitoring Well Groundwater Samples from Destroyed Wells</i> | | | | | | | | | | | | | | | | | | |
| MW-1 | 1/19/01 | 99.75 | 11.37 | 0.00 | 88.38 | 4,900 | 5 | 1.1 | 14 | 2.3 | 200 | 29 | <1 | 5.4 | 6.1 | <100 | <10 | |
| Screen | 5/4/01 | 99.75 | 11.29 | 0.00 | 88.46 | 4,500 | 12 | <2 | 7.8 | <2 | 620 | 31 | <2 | <2 | 24 | <500 | <20 | |
| 5' - 20' | 8/16/01 | 99.75 | 15.40 | 0.00 | 84.35 | 7,700 | 13 | 1.7 | 23 | 2.6 | 280 | 16 | <0.5 | 2.4 | 13 | <50 | <5 | |
| | 11/1/01 | 99.75 | 15.74 | 0.00 | 84.01 | 3,100 | 10 | 0.85 | 9.8 | 1.4 | 220 | 22 | <0.5 | 2.5 | 9.4 | <1,500 | <5 | |
| | 3/6/02 | 58.74 | 12.32 | 0.00 | 46.42 | 7,700 | 28 | <2.5 | 14 | <2.5 | 980 | 39 | <2.5 | 3.9 | 49 | -- | -- | |
| | 6/20/02 | 58.74 | 13.59 | 0.00 | 45.15 | 3,400 | 33 | <2.5 | 13 | <2.5 | 1,100 | 40 | <2.5 | 3 | 48 | -- | -- | |
| | 9/3/02 | 58.74 | 15.61 | 0.00 | 43.13 | 1,500 | 6.2 | <2.5 | <2.5 | <2.5 | 1,200 | 38 | <2.5 | 2.9 | 40 | -- | -- | |
| | 12/11/02 | 58.74 | 16.31 | 0.00 | 42.43 | 4,200 | 14 | <2 | 9.8 | <2 | 870 | 25 | <2 | 2.4 | 27 | -- | -- | |
| | 3/7/03 | 58.74 | 12.37 | 0.00 | 46.37 | 8,100 | 19 | <2.5 | 15 | 3.9 | 1,300 | 39 | <2.5 | <2.5 | 52 | -- | -- | |
| | 6/3/03 | 58.74 | 11.96 | 0.00 | 46.78 | 6,800 | 19 | <2.5 | 12 | <2.5 | 1,200 | 37 | <2.5 | 3 | 54 | -- | -- | |
| | 9/2/03 | 58.74 | 15.21 | 0.00 | 43.53 | 5,900 | 12 | <1.5 | 13 | 1.7 | 800 | 27 | <1.5 | 2.2 | 31 | -- | -- | |
| | 12/3/03 | 58.74 | 15.07 | 0.00 | 43.67 | 6,100 | 6.8 | 1.5 | 15 | 2.5 | 730 | 29 | <1 | 2.9 | 37 | -- | -- | |
| | 3/9/04 | 58.74 | 11.42 | 0.00 | 47.32 | 5,500 | 11 | <2 | 12 | <2 | 940 | 37 | <2 | 2.1 | 45 | -- | -- | |
| | 6/8/04 | 58.74 | 13.38 | 0.00 | 45.36 | 7,000 | 11 | <5 | 14 | <10 | 780 | <50 | <5 | <5 | 43 | -- | -- | |
| | 9/3/04 | 58.74 | 15.79 | 0.00 | 42.95 | 810 | 6.8 | <1 | 3.7 | <1 | 400 | -- | -- | -- | -- | -- | -- | |
| | 12/8/04 | 58.74 | 12.79 | 0.00 | 45.95 | 3,700 | 4.7 | 1.5 | 20 | 1.9 | 270 | -- | -- | -- | -- | -- | -- | |
| | 3/25/05 | 58.74 | 10.79 | 0.00 | 47.95 | 7,400 | 4.8 | 1.4 | 21 | 1.4 | 240 | -- | -- | -- | -- | -- | -- | |
| | 6/13/05 | 58.74 | 12.14 | 0.00 | 46.60 | 3,700 | 7.8 | 1.9 | 15 | 1.7 | 190 | -- | -- | -- | -- | -- | -- | |
| | 8/22/05 | 58.74 | 14.05 | 0.00 | 44.69 | 2,600 | 6.3 | 0.87 | 6.8 | 1.0 | 130 | -- | -- | -- | -- | -- | -- | |
| | 12/16/05 | 58.74 | 13.26 | 0.00 | 45.48 | 5,500 | 4.7 | 1.3 | 18 | 2.0 | 110 | -- | -- | -- | -- | -- | -- | |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | | |
| MW-2 | 1/19/01 | 99.24 | 12.41 | 0.00 | 86.83 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.4 | <5 | <0.5 | <0.5 | <0.5 | <50 | <5 | |
| Screen | 5/4/01 | 99.24 | 11.07 | 0.00 | 88.17 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 11 | <5 | <0.5 | <0.5 | <0.5 | <50 | <5 | |
| 5' - 15' | 8/16/01 | 99.24 | 14.24 | 0.00 | 85.00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 14 | <5 | <0.5 | <0.5 | <0.5 | <50 | <5 | |
| | 11/1/01 | 99.24 | Dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 3/6/02 | 58.18 | 10.74 | 0.00 | 47.44 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.2 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 6/20/02 | 58.18 | 12.70 | 0.00 | 45.48 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.3 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 9/3/02 | 58.18 | Dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12/11/02 | 58.18 | Dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 3/7/03 | 58.18 | 10.04 | 0.00 | 48.14 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 6/3/03 | 58.18 | 10.06 | 0.00 | 48.12 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 9/2/03 | 58.18 | 14.01 | 0.00 | 44.17 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 12/3/03 | 58.18 | 13.13 | 0.00 | 45.05 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 3/9/04 | 58.18 | 9.07 | 0.00 | 49.11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 6/8/04 | 58.18 | 12.14 | 0.00 | 46.04 | <50 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- | |
| | 9/3/04 | 58.18 | 14.55 | 0.00 | 43.63 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | |
| | 12/8/04 | 58.18 | 8.51 | 0.00 | 49.67 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | |
| | 3/25/05 | 58.18 | 8.63 | 0.00 | 49.55 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | |
| | 6/13/05 | 58.18 | 10.26 | 0.00 | 47.92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | |
| | 8/22/05 | 58.18 | 13.00 | 0.00 | 45.18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12/16/05 | 58.18 | 11.06 | 0.00 | 47.12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | | |
| MW-3 | 1/19/01 | 99.77 | 9.88 | 0.00 | 89.89 | <2,000 | <20 | <20 | <20 | <20 | 15,000 | 560 | <20 | <20 | 490 | <2,000 | <200 | |
| Screen | 5/4/01 | 99.77 | 4.96 | 0.00 | 94.81 | 4,800 | 630 | <20 | 72 | 130 | 7,700 | 570 | <20 | <20 | 200 | <2,000 | <200 | |
| 5' - 20' | 8/16/01 | 99.77 | 15.64 | 0.00 | 84.13 | 1,300 | 14 | 0.98 | 1.6 | 1.1 | 6,800 | 320 | <0.5 | 6 | 240 | <150 | <5 | |
| | 11/1/01 | 99.77 | 15.98 | 0.00 | 83.79 | <2,000 | <20 | <20 | <20 | <20 | 6,600 | 460 | <20 | <20 | 270 | <35,000 | <200 | |
| | 3/6/02 | 58.72 | 13.06 | 0.00 | 45.66 | <2,000 | <20 | 21 | <20 | <20 | 6,600 | 240 | <20 | <20 | 160 | -- | -- | |
| | 6/20/02 | 58.72 | 11.70 | 0.00 | 47.02 | 1,900 | 57 | <5 | <5 | <5 | 2,900 | 90 | <5 | <5 | 140 | -- | -- | |
| | 9/3/02 | 58.72 | 15.53 | 0.00 | 43.19 | <1,000 | <10 | <10 | <10 | <10 | 3,300 | 130 | <10 | <10 | 110 | -- | -- | |
| | 12/11/02 | 58.72 | 16.48 | 0.00 | 42.24 | <1,000 | <10 | <10 | <10 | <10 | 3,600 | 110 | <10 | <10 | 110 | -- | -- | |
| | 3/7/03 | 58.72 | 4.18 | 0.00 | 54.54 | 3,300 | 150 | 5.4 | 7.1 | 18 | 2,300 | 77 | <5 | <5 | 110 | -- | -- | |
| | 6/3/03 | 58.72 | 4.40 | 0.00 | 54.32 | 3,000 | 100 | 4.4 | 4.2 | 12 | 1,900 | 56 | <2.5 | <2.5 | 96 | -- | -- | |
| | 9/2/03 | 58.72 | 14.69 | 0.00 | 44.03 | <500 | <5 | <5 | <5 | <5 | 2,300 | 68 | <5 | <5 | 80 | -- | -- | |
| | 12/3/03 | 58.72 | 14.79 | 0.00 | 43.93 | 1,600 | 89 | <5 | <5 | <5 | 2,300 | 78 | <5 | <5 | 120 | -- | -- | |
| | 3/9/04 | 58.72 | 7.90 | 0.00 | 50.82 | 1,500 | 23 | <3 | <3 | <3 | 4,9 | 1,400 | 62 | <3 | <3 | 68 | -- | -- |
| | 6/8/04 | 58.72 | 11.28 | 0.00 | 47.44 | <5,000 | <50 | <50 | <100 | <100 | 1,800 | <500 | <50 | <50 | 89 | -- | -- | |
| | 8/13/04 | Removed during remedial soil excavation activities | | | | | | | | | | | | | | | | |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | | |

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project No. NC-004

| Sample ID | Sample Date | TOC (feet) | DTW (feet) | SPH (feet) | GWE (feet) | TPHg (µg/L) | B (µg/L) | T (µg/L) | E (µg/L) | X (µg/L) | MTBE (µg/L) | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | Methanol (µg/L) | Ethanol (µg/L) |
|---|-------------|--|------------|------------|------------|-------------|----------|----------|----------|----------|-------------|------------|-------------|-------------|-------------|-----------------|----------------|
| <i>Monitoring Well Groundwater Samples from Destroyed Wells</i> | | | | | | | | | | | | | | | | | |
| MW-4 | 1/19/01 | 99.12 | 12.17 | 0.00 | 86.95 | 150 | <1 | <1 | <1 | <1 | 680 | 210 | <1 | <1 | 11 | <100 | <10 |
| Screen | 5/4/01 | 99.12 | 10.71 | 0.00 | 88.41 | <200 | <2 | <2 | <2 | <2 | 440 | 120 | <2 | <2 | 16 | <200 | <20 |
| 5' - 20' | 8/16/01 | 99.12 | 14.83 | 0.00 | 84.29 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 250 | <5 | <0.5 | <0.5 | 10 | <50 | <5 |
| | 11/1/01 | 99.12 | 14.76 | 0.00 | 84.36 | 61 | <0.5 | <0.5 | <0.5 | <0.5 | 210 | 18 | <0.5 | <0.5 | 8.5 | <50 | <5 |
| | 3/6/02 | 58.07 | 10.28 | 0.00 | 47.79 | 220 | <0.5 | <0.5 | <0.5 | <0.5 | 130 | 40 | <0.5 | <0.5 | 5.4 | -- | -- |
| | 6/20/02 | 58.07 | 12.41 | 0.00 | 45.66 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 440 | 32 | <0.5 | <0.5 | 20 | -- | -- |
| | 9/3/02 | 58.07 | 14.34 | 0.00 | 43.73 | <250 | <2.5 | <2.5 | <2.5 | <2.5 | 1,300 | 35 | <2.5 | <2.5 | 34 | -- | -- |
| | 12/11/02 | 58.07 | 15.23 | 0.00 | 42.84 | <500 | <5 | <5 | <5 | <5 | 2,300 | <50 | <5 | <5 | 54 | -- | -- |
| | 3/7/03 | 58.07 | 10.48 | 0.00 | 47.59 | 330 | <1 | <1 | <1 | <1 | 570 | 33 | <1 | <1 | 28 | -- | -- |
| | 6/3/03 | 58.07 | 10.12 | 0.00 | 47.95 | 130 | <0.5 | <0.5 | <0.5 | <0.5 | 380 | 19 | <0.5 | <0.5 | 23 | -- | -- |
| | 9/2/03 | 58.07 | 13.82 | 0.00 | 44.25 | 85 | <0.5 | <0.5 | <0.5 | <0.5 | 390 | 12 | <0.5 | <0.5 | 17 | -- | -- |
| | 12/3/03 | 58.07 | 13.91 | 0.00 | 44.16 | 220 | <0.5 | <0.5 | <0.5 | <0.5 | 510 | 31 | <0.5 | <0.5 | 22 | -- | -- |
| | 3/9/04 | 58.07 | 9.51 | 0.00 | 48.56 | <500 | <5 | <5 | <5 | <5 | 2,000 | 220 | <5 | <5 | 5.6 | -- | -- |
| | 6/8/04 | 58.07 | 12.03 | 0.00 | 46.04 | 210 | <0.5 | <0.5 | <0.5 | <1 | 420 | 25 | <0.5 | <0.5 | 1.5 | -- | -- |
| | 9/3/04 | 58.07 | 14.41 | 0.00 | 43.66 | <100 | <1 | <1 | <1 | <1 | 430 | -- | -- | -- | -- | -- | -- |
| | 12/8/04 | 58.07 | 10.72 | 0.00 | 47.35 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 140 | -- | -- | -- | -- | -- | -- |
| | 3/25/05 | 58.07 | 8.97 | 0.00 | 49.10 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 40 | -- | -- | -- | -- | -- | -- |
| | 6/13/05 | 58.07 | 10.27 | 0.00 | 47.80 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 22 | -- | -- | -- | -- | -- | -- |
| | 8/22/05 | 58.07 | 12.72 | 0.00 | 45.35 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 29 | -- | -- | -- | -- | -- | -- |
| | 12/16/05 | 58.07 | 11.13 | 0.00 | 46.94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 13 | -- | -- | -- | -- | -- | -- |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | |
| MW-5 | 3/6/02 | 58.37 | 4.39 | 0.00 | 53.98 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.53 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| Screen | 6/20/02 | 58.49 | 12.50 | 0.00 | 45.99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.56 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- |
| 5' - 20' | 9/3/02 | 58.49 | 14.49 | 0.00 | 44.00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.3 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 12/11/02 | 58.49 | 15.39 | 0.00 | 43.10 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/7/03 | 58.49 | 8.76 | 0.00 | 49.73 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.95 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/3/03 | 58.49 | 8.12 | 0.00 | 50.37 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 9/2/03 | 58.49 | 14.02 | 0.00 | 44.47 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 12/3/03 | 58.49 | 14.04 | 0.00 | 44.45 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/9/04 | 58.49 | 6.35 | 0.00 | 52.14 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.1 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/8/04 | 58.49 | 11.95 | 0.00 | 46.54 | <50 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 9/3/04 | 58.49 | 14.50 | 0.00 | 43.99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 12/8/04 | 58.49 | 5.71 | 0.00 | 52.78 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 3/25/05 | 58.49 | 3.71 | 0.00 | 54.78 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 6/13/05 | 58.49 | 10.38 | 0.00 | 48.11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 8/22/05 | 58.49 | 13.11 | 0.00 | 45.38 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/16/05 | 58.49 | 10.38 | 0.00 | 48.11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | |
| MW-6 | 3/6/02 | 58.02 | 10.28 | 0.00 | 47.74 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| Screen | 6/20/02 | 58.02 | 12.62 | 0.00 | 45.40 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| 5' - 20' | 9/3/02 | 58.02 | 14.33 | 0.00 | 43.69 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 12/11/02 | 58.02 | 15.28 | 0.00 | 42.74 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/7/03 | 58.02 | 10.67 | 0.00 | 47.35 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/3/03 | 58.02 | 10.37 | 0.00 | 47.65 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 9/2/03 | 58.02 | 13.87 | 0.00 | 44.15 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 12/3/03 | 58.02 | 14.38 | 0.00 | 43.64 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/9/04 | 58.02 | 9.62 | 0.00 | 48.40 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/8/04 | 58.02 | 12.20 | 0.00 | 45.82 | <50 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 9/3/04 | 58.02 | 14.48 | 0.00 | 43.54 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| | 12/8/04 | 58.02 | 12.95 | 0.00 | 45.07 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 3/25/05 | 58.02 | 10.45 | 0.00 | 47.57 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 6/13/05 | 58.02 | 10.70 | 0.00 | 47.32 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- |
| | 8/22/05 | 58.02 | 12.84 | 0.00 | 45.18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/16/05 | 58.02 | 11.64 | 0.00 | 46.38 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | |

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project No. NC-004

| Sample ID | Sample Date | TOC (feet) | DTW (feet) | SPH (feet) | GWE (feet) | TPHg ($\mu\text{g/L}$) | B ($\mu\text{g/L}$) | T ($\mu\text{g/L}$) | E ($\mu\text{g/L}$) | X ($\mu\text{g/L}$) | MTBE ($\mu\text{g/L}$) | TBA ($\mu\text{g/L}$) | DIPE ($\mu\text{g/L}$) | ETBE ($\mu\text{g/L}$) | TAME ($\mu\text{g/L}$) | Methanol ($\mu\text{g/L}$) | Ethanol ($\mu\text{g/L}$) |
|---|-------------|--|------------|------------|------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|------------------------------|-----------------------------|
| <i>Monitoring Well Groundwater Samples from Destroyed Wells</i> | | | | | | | | | | | | | | | | | |
| MW-7 | 3/6/02 | 58.42 | 3.68 | 0.00 | 54.74 | 110 | <0.5 | <0.5 | <0.5 | <0.5 | 78 | <5 | <0.5 | <0.5 | 1.4 | -- | -- |
| Screen | 6/20/02 | 58.42 | 4.27 | 0.00 | 54.15 | 200 | <0.5 | <0.5 | <0.5 | <0.5 | 26 | <5 | <0.5 | <0.5 | 0.7 | -- | -- |
| 5' - 20' | 9/3/02 | 58.42 | 5.77 | 0.00 | 52.65 | 250 | <0.5 | <0.5 | <0.5 | 2.5 | 30 | 15 | <0.5 | <0.5 | 0.51 | -- | -- |
| | 12/11/02 | 58.42 | 6.21 | 0.00 | 52.21 | 360 | <0.5 | <0.5 | <0.5 | 4.5 | 37 | 9.2 | <0.5 | <0.5 | 0.74 | -- | -- |
| | 3/7/03 | 58.42 | 3.80 | 0.00 | 54.62 | 780 | <0.5 | <0.5 | 1.1 | 3.8 | 21 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/3/03 | 58.42 | 3.47 | 0.00 | 54.95 | 650 | <0.5 | <0.5 | 0.85 | 2.6 | 17 | 5.3 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 9/2/03 | 58.42 | 4.70 | 0.00 | 53.72 | 470 | <0.5 | <0.5 | 0.59 | 1.6 | 13 | 7.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 12/3/03 | 58.42 | 4.78 | 0.00 | 53.64 | 490 | <0.5 | <0.5 | 0.64 | 1.5 | 17 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/9/04 | 58.42 | 3.45 | 0.00 | 54.97 | 530 | <0.5 | <0.5 | 0.9 | 1.7 | 16 | 8.9 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/8/04 | 58.42 | 3.75 | 0.00 | 54.67 | 540 | <0.5 | <0.5 | 0.7 | 0.8 | 11 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 9/3/04 | 58.42 | 5.33 | 0.00 | 53.09 | 290 | <0.5 | <0.5 | <0.5 | 0.9 | 8.1 | -- | -- | -- | -- | -- | -- |
| | 12/8/04 | 58.42 | 2.75 | 0.00 | 55.67 | 670 | 0.57 | <0.5 | 1.2 | 0.85 | 13 | -- | -- | -- | -- | -- | -- |
| | 3/25/05 | 58.42 | 3.24 | 0.00 | 55.18 | 1,100 | 0.56 | 0.58 | 2.8 | 0.92 | 8.4 | -- | -- | -- | -- | -- | -- |
| | 6/13/05 | 58.42 | 3.87 | 0.00 | 54.55 | 770 | <0.5 | <0.5 | 1.1 | 0.80 | 6.0 | -- | -- | -- | -- | -- | -- |
| | 8/22/05 | 58.42 | 4.38 | 0.00 | 54.04 | 530 | <0.5 | <0.5 | <0.5 | <0.5 | 2.7 | -- | -- | -- | -- | -- | -- |
| | 12/16/05 | 58.42 | 3.72 | 0.00 | 54.70 | 540 | <0.5 | <0.5 | <0.5 | <0.5 | 4.4 | -- | -- | -- | -- | -- | -- |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | |
| MW-8 | 6/20/02 | 58.81 | 4.75 | 0.00 | 54.06 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 14 | <5 | <0.5 | <0.5 | 0.52 | -- | -- |
| Screen | 9/3/02 | 58.81 | 14.76 | 0.00 | 44.05 | <50 | <0.5 | <0.5 | <0.5 | 0.63 | 11 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| 5' - 20' | 12/11/02 | 58.81 | 16.55 | 0.00 | 42.26 | 92 | <0.5 | <0.5 | <0.5 | 2.1 | 21 | <5 | <0.5 | <0.5 | 1.1 | -- | -- |
| | 3/7/03 | 58.81 | 11.89 | 0.00 | 46.92 | 67 | <0.5 | <0.5 | <0.5 | <0.5 | 17 | <5 | <0.5 | <0.5 | 0.99 | -- | -- |
| | 6/3/03 | 58.81 | 11.67 | 0.00 | 47.14 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 25 | <5 | <0.5 | <0.5 | 1.5 | -- | -- |
| | 9/2/03 | 58.81 | 15.53 | 0.00 | 43.28 | 51 | <0.5 | <0.5 | <0.5 | <0.5 | 56 | <5 | <0.5 | <0.5 | 3.6 | -- | -- |
| | 12/3/03 | 58.81 | 15.31 | 0.00 | 43.50 | 57 | <0.5 | <0.5 | <0.5 | <0.5 | 10 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/9/04 | 58.81 | 9.82 | 0.00 | 48.99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 4.3 | <5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 6/8/04 | 58.81 | 13.28 | 0.00 | 45.53 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 37 | <5 | <0.5 | <0.5 | 0.9 | -- | -- |
| | 9/3/04 | 58.81 | 15.68 | 0.00 | 43.13 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 21 | -- | -- | -- | -- | -- | -- |
| | 12/8/04 | 58.81 | 13.47 | 0.00 | 45.34 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 41 | -- | -- | -- | -- | -- | -- |
| | 3/25/05 | 58.81 | 11.26 | 0.00 | 47.55 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 16 | -- | -- | -- | -- | -- | -- |
| | 6/13/05 | 58.81 | 11.85 | 0.00 | 46.96 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.6 | -- | -- | -- | -- | -- | -- |
| | 8/22/05 | 58.81 | 14.11 | 0.00 | 44.70 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 10 | -- | -- | -- | -- | -- | -- |
| | 12/16/05 | 58.81 | 12.90 | 0.00 | 45.91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.2 | -- | -- | -- | -- | -- | -- |
| | 3/15/06 | Monitoring well destroyed under permit | | | | | | | | | | | | | | | |
| <i>Grab Groundwater Samples from Potentially Mixed Zones</i> | | | | | | | | | | | | | | | | | |
| GW-3 (B-3) | 5/8/99 | -- | -- | 0.00 | -- | 23,000 | 63 | 110 | 600 | 1,630 | <130 | -- | -- | -- | -- | -- | -- |
| | | | | | | MCL | --- | 1.0 | 150 | 300 | 1,750 | 13 | | | | | |
| | | | | | | Taste and odor threshold | 5 | --- | 42 | 29 | 17 | 5 | | | | | |
| | | | | | | NCRWQCB Cleanup Goals | 50 | 0.5 | 42 | 29 | 17 | 5 | | | | | |

Notes :

TOC: Top of well casing referenced to arbitrary site benchmark until 3/02, MSL thereafter

DTW: Depth to water as referenced to top of casing

SPH: Separate phase hydrocarbon on top of groundwater

GWE: Groundwater elevation as referenced to benchmark

$\mu\text{g/L}$ = micrograms per liter

TPHg: Total petroleum hydrocarbons as gasoline by Method 5030/8015M or 5030/8260B

BTEX: Benzene, toluene, ethylbenzene, xylenes by EPA Method 8020 or 8260B

MTBE: Methyl tertiary butyl ether by Method 8020 or 8260B

MW-16 (LOP #12093) was used for the purpose of obtaining additional groundwater gradient and direction data.

TBA: Tertiary butyl alcohol by Method 8260B

DIPE: Di isopropyl ether by Method 8260B

ETBE: Ethyl tertiary butyl ether by Method 8260B

TAME: Tertiary amyl methyl ether by method 8260B

Methanol: by EPA Method 8260B

Ethanol: by EPA Method 8260B

MCL : Maximum contaminant level

NCRWQCB : North Coast Region Water Quality Control Board

Table 3
INTRINSIC BIOREMEDIAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project # NC-004

| Well ID | Date | TPHg | MTBE | DO* | Eh* | Total Alkalinity | Nitrate | Ammonia | Sulfate | Sulfide | Ortho Phosphate | Ferrous Iron | Dissolved Manganese | TOC | BOD | COD | Heterotrophic Plate Count | Aerobic Hydrocarbon Degraders |
|--|----------|---------------------|---------------------|-------------------|------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|----------|---------------------------|-------------------------------|
| | | ($\mu\text{g/L}$) | ($\mu\text{g/L}$) | (mg/L) | (mV) | pH* | (mg/L) | (mg/L) | (mg/L) | (CFU/mL) | (CFU/mL) | |
| <i>A-Zone (~4-10 ft bgs) Monitoring Wells</i> | | | | | | | | | | | | | | | | | | |
| MW-9A | 8/21/01 | dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | 2.0 | 4.30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <50 | 1.3 | 1.84 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 34 | 2.34 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-10A | 8/21/01 | <50 | <0.5 | 6.11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | <0.5 | 2.09 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <50 | <0.5 | 1.47 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | <0.5 | 3.59 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-11A | 8/21/01 | dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <50 | 1.7 | 1.43 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-12A | 3/20/02 | <50 | <0.5 | 1.58 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | dry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-13A | 3/20/02 | <50 | 3.8 | 0.62 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 3.1 | 0.51 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| <i>B-Zone (~15-20 ft bgs) Monitoring Wells</i> | | | | | | | | | | | | | | | | | | |
| MW-9B | 8/21/01 | 220 | 860 | 3.37 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | 120 | 1,000 | 1.10 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <200 | 920 | 3.14 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <200 | 840 | 3.50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-10B | 8/21/01 | <50 | 5.3 | 7.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | 1.8 | 5.64 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <50 | 0.99 | 1.59 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 2.4 | 2.75 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-11B | 8/21/01 | <50 | 160 | 2.81 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | 180 | 0.65 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <50 | 120 | 0.83 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 110 | 0.76 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-12B | 3/20/02 | 94 | 4.6 | 2.56 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 4.4 | 0.90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-13B | 3/20/02 | <50 | 11 | 1.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 17 | 0.91 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-16 (HPI) | 8/21/01 | <50 | 57 | 1.01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | 8.2 | 0.90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/20/02 | <50 | 4.2 | 0.91 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/02 | <50 | 15 | 1.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| <i>Destroyed Monitoring Wells</i> | | | | | | | | | | | | | | | | | | |
| MW-1 | 6/19/98 | 3,400 | 1,100 | 0.41 | -- | 6.4 | 310 | 0.56 | 7.6 | 1.6 | -- | <0.5 | 7.4 | -- | 52 | 5.4 | 97 | 7,000 |
| | 12/10/98 | 4,200 | 870 | 2.91 | 80 | 5.8 | 370 | 0.87 | 7.9 | 0.87 | <1 | <0.5 | 8.1 | 6,800 | 39 | 12 | 120 | 20,000 |
| | 9/2/00 | 810 | 400 | 1.87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | 3,700 | 270 | 1.80 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | 7,400 | 240 | 0.65 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | 3,700 | 190 | 3.16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | 2,600 | 130 | 2.56 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | 5,500 | 110 | 2.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-2 | 6/19/98 | <50 | 2.3 | 0.47 | 0.47 | 6.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/98 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/2/00 | <50 | <0.5 | 2.08 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | <50 | <0.5 | 2.23 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | <50 | <0.5 | 5.78 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | <50 | <0.5 | 4.25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | -- | -- | 3.01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | -- | -- | 4.67 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

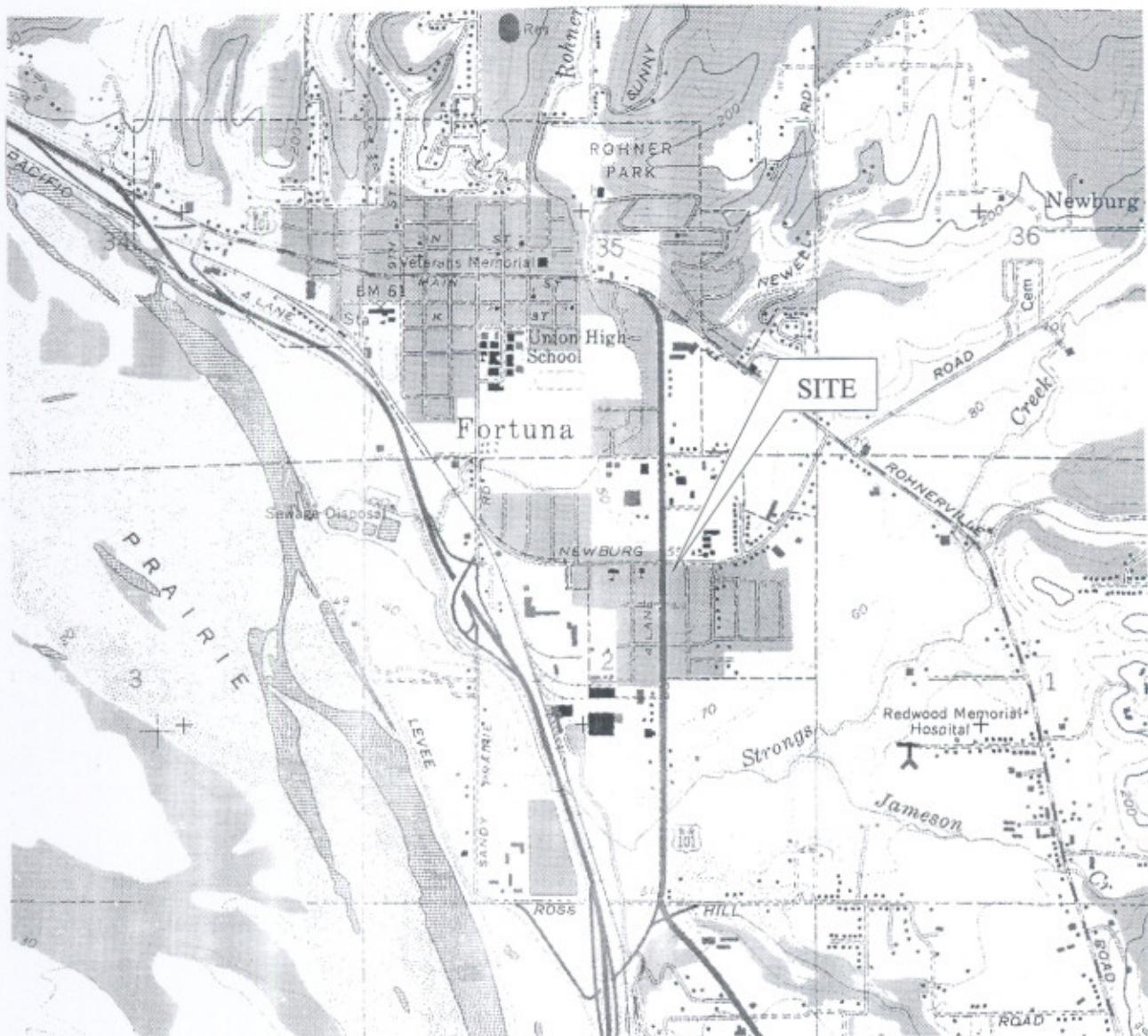
Table 3
INTRINSIC BIOREMEDIAL DATA
Former Cash Oil Fortuna
409 South Fortuna Blvd, Fortuna, CA
Blue Rock Project # NC-004

| Well ID | Date | TPHg ($\mu\text{g/L}$) | MTBE ($\mu\text{g/L}$) | DO* (mg/L) | Eh* (mV) | pH* | Total Alkalinity (mg/L) | Nitrate (mg/L) | Ammonia (mg/L) | Sulfate (mg/L) | Sulfide (mg/L) | Ortho Phosphate (mg/L) | Ferrous Iron (mg/L) | Dissolved Manganese (mg/L) | TOC (mg/L) | BOD (mg/L) | COD (mg/L) | Heterotrophic Plate Count (CFU/mL) | Aerobic Hydrocarbon Degraders (CFU/mL) |
|-----------------------------------|----------|--------------------------|--------------------------|------------|----------|-----|-------------------------|----------------|----------------|----------------|----------------|------------------------|---------------------|----------------------------|------------|------------|------------|------------------------------------|--|
| <i>Destroyed Monitoring Wells</i> | | | | | | | | | | | | | | | | | | | |
| MW-3 | 6/19/98 | 1,900 | 2,900 | 0.42 | -- | 6.5 | 340 | 0.54 | 10 | 1.2 | -- | <0.5 | 8.2 | -- | 44 | 4.2 | 110 | 20,000 | 3,000 |
| | 12/10/98 | <1,000 | 3,600 | 3.12 | 50 | 4.4 | 350 | 0.94 | 10 | 1.4 | <1 | <0.5 | 6.9 | 17,000 | 32 | 12 | 110 | 20,000 | 300 |
| MW-4 | 6/19/98 | <50 | 440 | 0.62 | -- | 6.4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/98 | <500 | 2,300 | 2.87 | 165 | 6.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/2/00 | <100 | 430 | 1.96 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | <50 | 140 | 1.95 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | <50 | 40 | 0.40 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | <50 | 22 | 0.60 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | <50 | 29 | 0.66 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | 13 | 0.68 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-5 | 6/19/98 | <50 | <0.5 | 0.57 | -- | 6.4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/98 | <50 | <0.5 | 2.71 | 197 | 6.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/2/00 | <50 | <0.5 | 2.36 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | <50 | <0.5 | 2.08 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | <50 | <0.5 | 4.17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | <50 | <0.5 | 4.50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | -- | -- | 1.63 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | -- | -- | 2.47 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-6 | 6/19/98 | <50 | <0.5 | 0.56 | -- | 6.4 | 87 | 13 | <0.1 | 6.9 | -- | <0.5 | <0.1 | -- | 4.2 | <3 | 13 | 200,000 | 40,000 |
| | 12/10/98 | <50 | <0.5 | 3.25 | 146 | 5.9 | 85 | 12 | 0.16 | 4.4 | <1 | <0.5 | <0.1 | 18 | 3.2 | <3 | <10 | 80,000 | 200 |
| | 9/2/00 | <50 | <0.5 | 2.11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | <50 | <0.5 | 2.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | <50 | <0.5 | 4.27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | <50 | <0.5 | 4.61 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | -- | -- | 5.91 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | -- | -- | 6.45 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-7 | 6/19/98 | 200 | 26 | 0.61 | -- | 6.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/98 | 360 | 37 | 2.78 | 21 | 5.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/2/00 | 290 | 8.1 | 2.12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | 670 | 13 | 1.57 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | 1,100 | 8.4 | 0.47 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | 770 | 6.0 | 0.51 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | 530 | 2.7 | 0.51 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | 540 | 4.4 | 0.58 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW-8 | 6/19/98 | <50 | 14 | 0.58 | -- | 6.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/98 | 92 | 21 | 2.37 | 79 | 5.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/2/00 | <50 | 21 | 1.99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/00 | <50 | 41 | 2.20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/24/01 | <50 | 16 | 2.13 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/12/01 | <50 | 5.6 | 0.72 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/01 | <50 | 10 | 0.67 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/15/01 | <50 | 5.2 | 0.61 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Notes:

TPHg Total petroleum hydrocarbons as gasoline by EPA Method 5030/8260B
MTBE Methyl tertiary butyl ether by EPA Method 8260B
 $\mu\text{g/L}$ micrograms per liter
mg/L milligrams per liter
* Parameters measured in field and recorded on field sheets
mV Millivolts
CFU/mL Colony forming units per milliliter
DO Dissolved oxygen measured with downhole meter
Eh Reduction-oxidation potential measured with downhole meter
pH pH measured with field meter
Alkalinity by EPA Method 310.1
Nitrate by EPA Method 300.0
Ammonia by EPA Method 350.2
Manganese by EPA Method 200.7

Sulfate by EPA Method 375.4
Sulfide by EPA Method 376.2
Phosphate by EPA Method 365.2
TOC Total organic carbon by EPA Method 9060
Ferrous Iron by Standard Method 3500
BOD Biological oxygen demand by Standard Method 5210B
COD Chemical oxygen demand by EPA Method 410.4
Heterotrophic Plate Count Bacteria enumeration assay by Standard Method 9215B modified
Hydrocarbon Degraders Bacteria enumeration assay for diesel and gasoline degraders
"--" Not analyzed, available, or applicable
<#> Not detected above the number indicated



SCALE 1:24000

1 0
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0
1 KILOMETER

CONTOUR INTERVAL 40 FEET



MAP SOURCE: USGS Fortuna Quadrangle

Site Location Map

Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California



BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-004

Date
4/04

Figure
1

Fortuna Beacon
Gas Station

MW-4
(HPI)

SW-9
(HPI)
HP-1
(HPI)
MW-10
(HPI)

Newburg Road

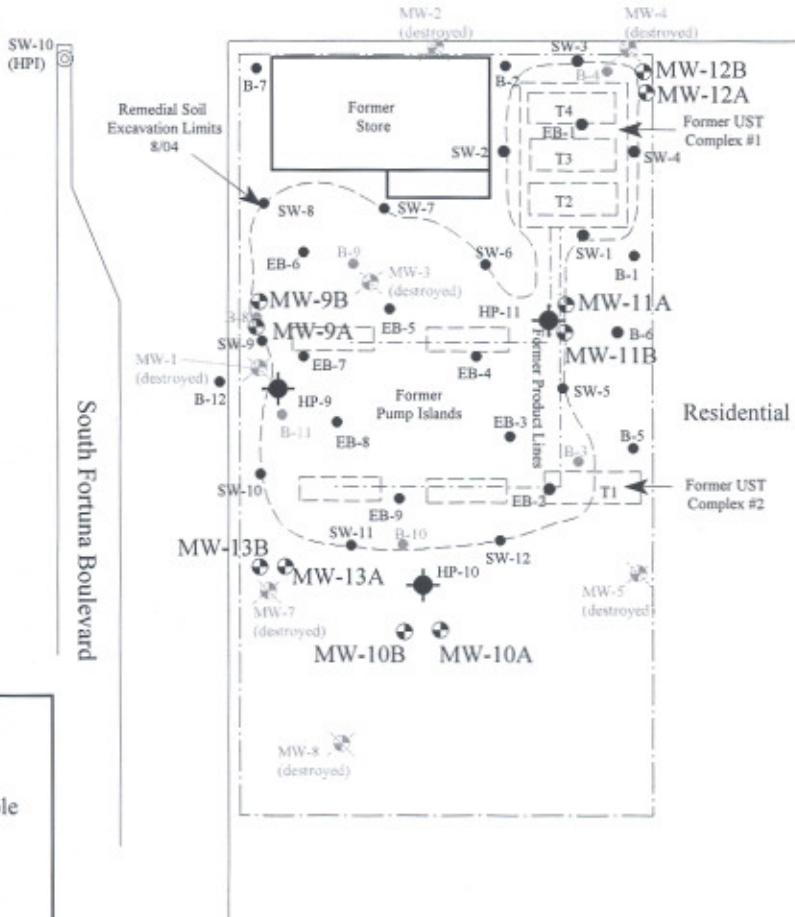
MW-12
(HPI)

MW-16
(HPI)

KFC Restaurant

South Fortuna Elementary School
(Parking Lot)

MW-6
(destroyed)



EXPLANATION

- MW-1 Monitoring Well
- B-1, EB Soil Boring or Excavation Sample
- SW-1 Soil Boring with Temp. Screen
- HP-1 Soil Boring
- HP-10 Deep Hydropunch
- (HPI) Humboldt Petr. Investigation Point related to 390 S. Fortuna Blvd.
- B-10 Investigation Point Removed by Remedial Excavation
- Property Line

0 40
APPROXIMATE SCALE IN FEET



Site Plan

Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-004

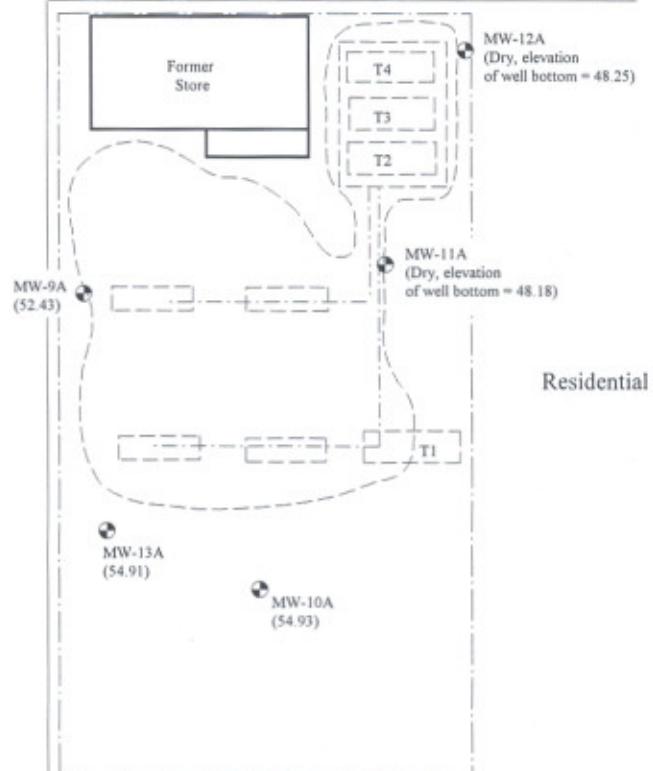
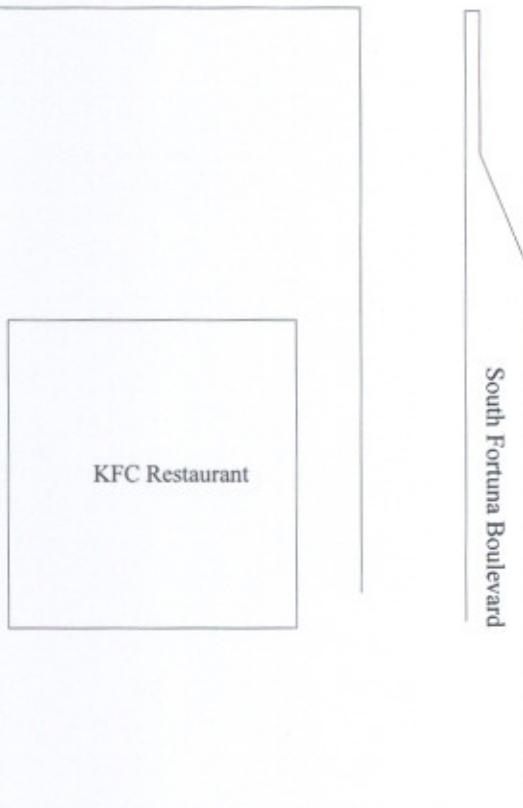
Report Date
6/06

Figure
2

Fortuna Beacon
Gas Station

South Fortuna Elementary School
(Parking Lot)

Newburg Road

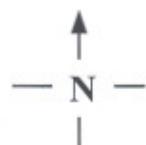


EXPLANATION

MW-9A ● Shallow 10ft Monitoring Well and
(52.43) Groundwater Elevation (Ft MSL)

Meaningful groundwater elevation contour patterns
not discernable from June 6, 2006 data. Non-patterned
groundwater elevations may be the result of slightly irregular
surface of perching horizon.

0 40
APPROXIMATE SCALE IN FEET



Groundwater Elevation Map - A-Zone June 6, 2006

Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-004

Report Date
6/06

Figure
3a

Fortuna Beacon
Gas Station

South Fortuna Elementary School
(Parking Lot)

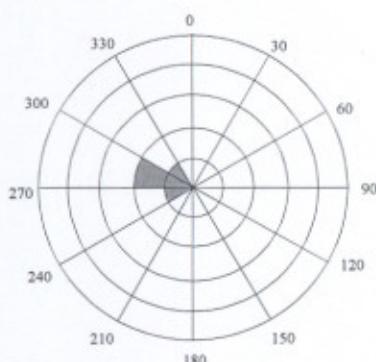
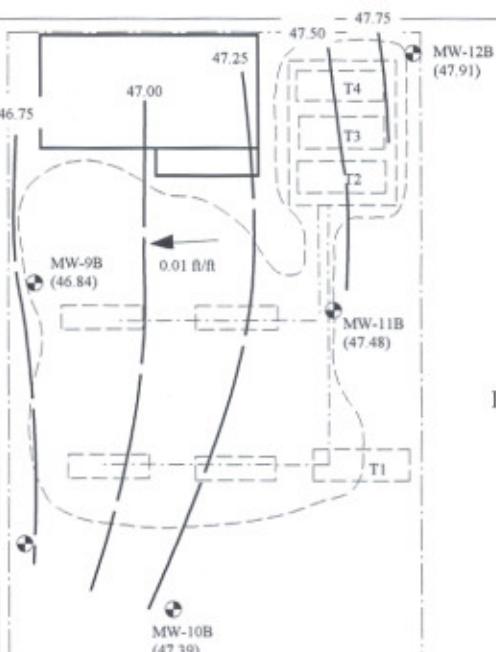
Newburg Road

MW-16
(HPI)
(46.56)

KFC Restaurant

South Fortuna Boulevard

MW-13B
(46.62)



0 40
APPROXIMATE SCALE IN FEET

EXPLANATION

MW-9B (46.84)
Deep 20ft Monitoring Well and
Groundwater Elevation (Ft MSL)

0.01 ft/ft
Estimated Groundwater Flow Direction
and Gradient for B-Zone
(* data not used in calculation)

(HPI)
Humboldt Petr. Investigation Point
related to 390 S. Fortuna Blvd.

Groundwater Elevation Map - B-Zone June 6, 2006

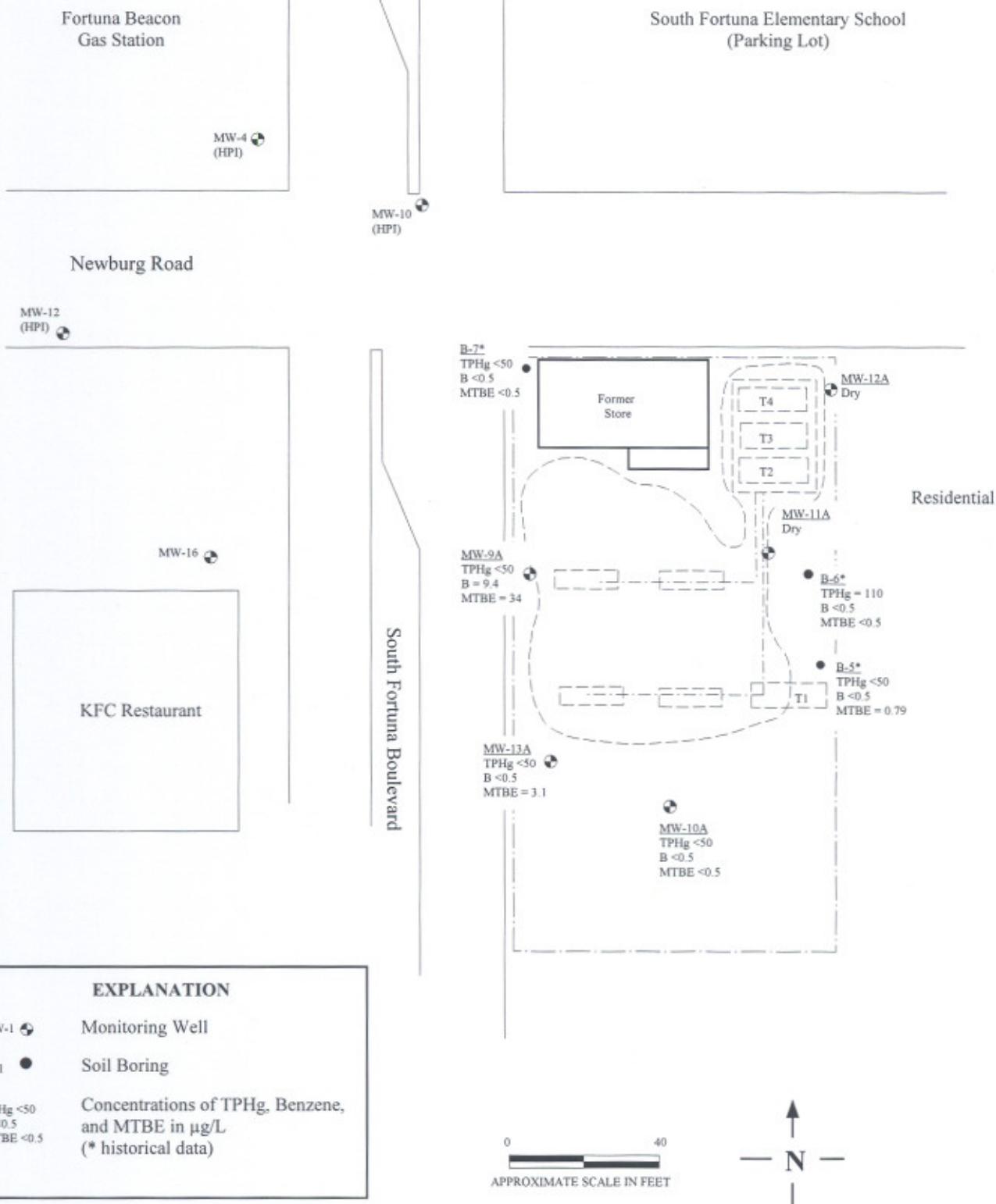
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-004

Report Date
6/06

Figure
3b



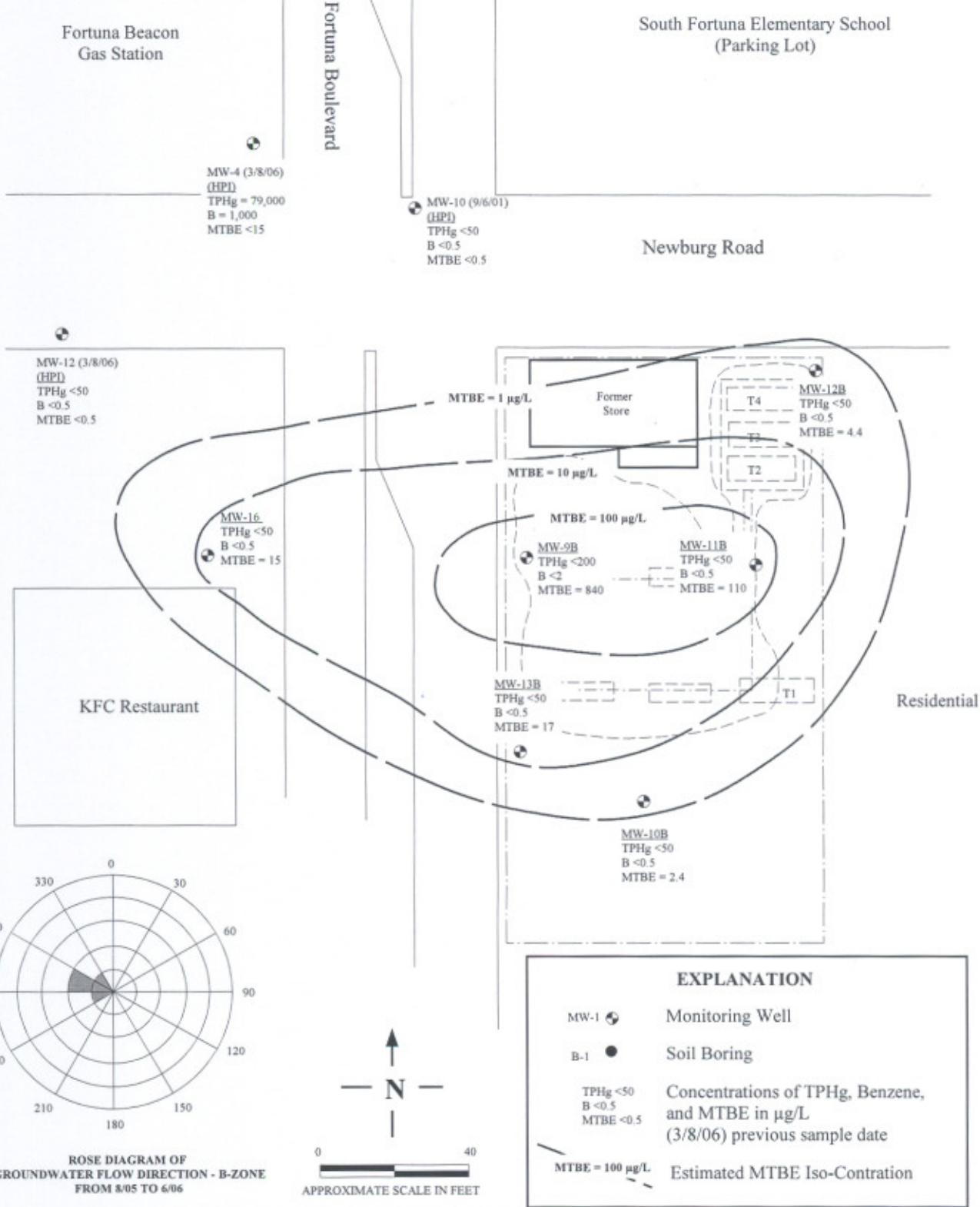
Groundwater Analytical Map - A-Zone
June 6, 2006
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

 **BLUE ROCK ENVIRONMENTAL, INC.**

Project No.
NC-004

Report Date
6/06

Figure
4a



Groundwater Analytical Map - B-Zone
June 6, 2006
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

| | | |
|-----------------------|---------------------|--------------|
| Project No. NC-004 | Report Date 6/06 | Figure 4b |
|-----------------------|---------------------|--------------|

DAILY FIELD REPORT

PAGE _____ OF

Project Number: NC-4

Date:

6/6/06

Site Name: Former Cash Oil Fortune

Field Personnel: James Linderman

Site Address: 409 S. Fortuna Blvd, Fortuna, CA Proj. Manager Scott Ferriman

Scope of work ZQT06 GWS

Drum Inventory Soil: Water: 4 full Free product:

Additional Comments: _____

GAGING DATA/PURGE CALCULATIONS

Job No.: NC-4 Location: 409 S. Fortuna Blvd. Date: 6/6/06 Tech(s): JL

Explanation:

DIA. = Well Diameter

DTB = Depth to Bottom

DTW = Depth to Water

ST = Saturated Thickness (DTB-DTW)

CV = Casing Volume (ST x cf)

PV = Purge Volume (standard 3 x CV,

well development 10 x CV)

SPH = Thickness of Separate Phase Hydrocarbons

Conversion Factors (cf):

2 in. dia. well cf = 0.16 gal./ft.

4 in. dia. well cf = 0.65 gal./ft.

6 in. dia. well cf = 1.44 gal./ft.



BLUE ROCK
ENVIRONMENTAL, INC.

PURGING DATA

SHEET 1 OF 4

Job No.: NC-4 Location: 409 S. Fotuna Blvd. Date: 6/6/06 Tech: JL,

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-16 | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 10:35 | 0.25 | 721 | 61.2 | 6.34 | TPHg TPHd 8260 |
| 4.08 | 10:40 | 2.25 | 199 | 61.0 | 6.26 | BTEX MTBE Metals |
| | 10:45 | 4.10 | 198 | 61.0 | 6.28 | Purging Method: |
| | | | | | | PVC bailed / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear/mod/mod/no sheen/no odor | | | | | Dedicated / Disposable bailed |

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-9B | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 10:55 | 0.25 | 521 | 60.9 | 6.19 | TPHg TPHd 8260 |
| 3.93 | 11:00 | 1.75 | 529 | 60.4 | 6.21 | BTEX MTBE Metals |
| | 11:05 | 3.95 | 527 | 60.5 | 6.27 | Purging Method: |
| | | | | | | PVC bailed / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear/mod/mod/no sheen/no odor | | | | | Dedicated / Disposable bailed |

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-9A | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 11:15 | 0.25 | 610 | 62.9 | 6.81 | TPHg TPHd 8260 |
| 1.44 | 11:20 | 0.75 | 657 | 62.2 | 6.90 | BTEX MTBE Metals |
| | 11:25 | 1.45 | 659 | 62.0 | 6.96 | Purging Method: |
| | | | | | | PVC bailed / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear/mod/mod/no sheen/no odor | | | | | Dedicated / Disposable bailed |

PURGING DATA

SHEET 2 OF 4

Job No.: NC-4 Location: 409 S. Fortune Blvd Date: 6/6/06 Tech: JL.

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-10B | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 11:35 | 0.25 | 251 | 60.1 | 7.21 | TPHg TPHd 8260 |
| 3,90 | 11:40 | 1.75 | 297 | 59.3 | 6.86 | BTEX MTBE Metals |
| | 11:45 | 3.90 | 302 | 59.3 | 6.84 | Purging Method: |
| | | | | | | PVC bailer / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear/mod/mod/no sheen/no odor | | | | | Dedicated / Disposable bailer |
| | | | | | | Sample at: 11:50 |

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-10A | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 11:55 | 0.25 | 174 | 64.0 | 6.76 | TPHg TPHd 8260 |
| 2.97 | 12:00 | 1.50 | 175 | 62.6 | 6.40 | BTEX MTBE Metals |
| | 12:05 | 2.95 | 169 | 61.6 | 6.40 | Purging Method: |
| | | | | | | PVC bailer / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear/mod/good/no sheen/no odor | | | | | Dedicated / Disposable bailer |
| | | | | | | Sample at: 12:10 |

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-11B | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 12:15 | 0.25 | 220 | 60.7 | 6.34 | TPHg TPHd 8260 |
| 4.29 | 12:20 | 2.25 | 235 | 60.0 | 6.21 | BTEX MTBE Metals |
| | 12:25 | 4.30 | 235 | 59.9 | 6.23 | Purging Method: |
| | | | | | | PVC bailer / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear/mod/mod/no sheen/no odor | | | | | Dedicated / Disposable bailer |
| | | | | | | Sample at: 12:30 |

PURGING DATA

SHEET 3 OF 4

Job No.: NC-4 Location: 409 S. Fortuna Blvd. Date: 6/6/06 Tech: J.L.

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|-----|-------------------------------|
| MW-11A | | | --- | --- | --- | Sample for: |
| Calc. purge volume | | | | | | TPHg TPHd 8260 |
| | well | dry | no | | | BTEX MTBE Metals |
| | Sample taken | | | | | Purging Method: |
| | | | | | | PVC bailer / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | | | | | | Dedicated / Disposable bailed |
| | | | | | | Sample at: |

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|-----|-------------------------------|
| MW-12A | | | --- | --- | --- | Sample for: |
| Calc. purge volume | | well | dry | no | | TPHg TPHd 8260 |
| | Sample taken | | | | | BTEX MTBE Metals |
| | | | | | | Purging Method: |
| | | | | | | PVC bailer / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | | | | | | Dedicated / Disposable bailed |
| | | | | | | Sample at: |

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|---|------------------|------------------|--------------------|------|-------------------------------|
| MW-12B | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 12:35 | 0.25 | 298 | 59.8 | 6.73 | TPHg TPHd 8260 |
| | 12:40 | 2.25 | 366 | 58.9 | 6.76 | BTEX MTBE Metals |
| | 12:45 | 4.25 | 387 | 58.8 | 6.80 | Purging Method: |
| | | | | | | PVC bailer / Pump |
| | COMMENTS: color, turbidity, recharge, sheen | | | | | Sampling Method: |
| | clear / mod / mod / no sheen / no odor | | | | | Dedicated / Disposable bailed |
| | | | | | | Sample at: |
| | | | | | | 12:50 |

PURGING DATA

SHEET 4 OF 4

Job No.: NC-4 Location: 409 S. Fortuna Blvd., Date: 6/6/06 Tech: JL.

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|-------|------------------|------------------|--------------------|------|-------------------|
| MW-13A | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 9:55 | 0.25 | 354 | 63.9 | 6.23 | TPHg TPHd 8260 |
| | 10:00 | 1.25 | 336 | 62.8 | 6.25 | BTEX MTBE Metals |
| 2.76 | 10:05 | 2.75 | 327 | 62.6 | 6.27 | Purging Method: |
| | | | | | | PVC bailer / Pump |

COMMENTS: color, turbidity, recharge, sheen

Clear/mod/mod/no sheen/no odor

Sampling Method:

Dedicated / Disposable bailer

Sample at: 10:10

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|-------|------------------|------------------|--------------------|------|-------------------|
| MW-13B | | | --- | --- | --- | Sample for: |
| Calc. purge volume | 10:15 | 0.25 | 502 | 61.0 | 6.42 | TPHg TPHd 8260 |
| | 10:20 | 1.75 | 497 | 60.4 | 6.55 | BTEX MTBE Metals |
| 3.66 | 10:25 | 3.65 | 458 | 60.4 | 6.60 | Purging Method: |
| | | | | | | PVC bailer / Pump |

COMMENTS: color, turbidity, recharge, sheen

Clear/mod/mod/no sheen/no odor

Sampling Method:

Dedicated / Disposable bailer

Sample at: 10:30

| WELL No. | TIME | VOLUME (gal.) | COND. (mS/cm) | TEMP. (deg. F.) | pH | |
|-----------------------|------|------------------|------------------|--------------------|-----|-------------------|
| | | | --- | --- | --- | Sample for: |
| Calc. purge volume | | | | | | TPHg TPHd 8260 |
| | | | | | | BTEX MTBE Metals |
| | | | | | | Purging Method: |
| | | | | | | PVC bailer / Pump |

COMMENTS: color, turbidity, recharge, sheen

Sampling Method:

Dedicated / Disposable bailer

Sample at:



Report Number : 50403
Date : 6/14/2006

Scott Ferriman
Blue Rock Environmental, Inc.
535 3rd Street, Suite 100
Eureka, CA 95501

Subject : 9 Water Samples
Project Name : Cash Oil Fortuna
Project Number : NC-4

Dear Mr. Ferriman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff".

Joel Kiff



Report Number : 50403

Date : 6/14/2006

Project Name : Cash Oil Fortuna

Project Number : NC-4

Sample : MW-16

Matrix : Water

Lab Number : 50403-01

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | 15 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 102 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 96.9 | | % Recovery | EPA 8260B | 6/9/2006 |

Sample : MW-9B

Matrix : Water

Lab Number : 50403-02

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 2.0 | 2.0 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene | < 2.0 | 2.0 | ug/L | EPA 8260B | 6/8/2006 |
| Ethylbenzene | < 2.0 | 2.0 | ug/L | EPA 8260B | 6/8/2006 |
| Total Xylenes | < 2.0 | 2.0 | ug/L | EPA 8260B | 6/8/2006 |
| Methyl-t-butyl ether (MTBE) | 840 | 2.0 | ug/L | EPA 8260B | 6/8/2006 |
| TPH as Gasoline | < 200 | 200 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene - d8 (Surr) | 100 | | % Recovery | EPA 8260B | 6/8/2006 |
| 4-Bromofluorobenzene (Surr) | 98.0 | | % Recovery | EPA 8260B | 6/8/2006 |

Approved By:

Joe Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 50403

Date : 6/14/2006

Project Name : Cash Oil Fortuna

Project Number : NC-4

Sample : MW-9A

Matrix : Water

Lab Number : 50403-03

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | 9.4 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Methyl-t-butyl ether (MTBE) | 34 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene - d8 (Surr) | 95.1 | | % Recovery | EPA 8260B | 6/8/2006 |
| 4-Bromofluorobenzene (Surr) | 115 | | % Recovery | EPA 8260B | 6/8/2006 |

Sample : MW-10B

Matrix : Water

Lab Number : 50403-04

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | 2.4 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 99.7 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 102 | | % Recovery | EPA 8260B | 6/9/2006 |

Approved By:

Joe Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 50403

Date : 6/14/2006

Project Name : Cash Oil Fortuna

Project Number : NC-4

Sample : MW-10A

Matrix : Water

Lab Number : 50403-05

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 102 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 99.1 | | % Recovery | EPA 8260B | 6/9/2006 |

Sample : MW-11B

Matrix : Water

Lab Number : 50403-06

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | 110 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 102 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 98.8 | | % Recovery | EPA 8260B | 6/9/2006 |

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 50403

Date : 6/14/2006

Project Name : Cash Oil Fortuna

Project Number : NC-4

Sample : MW-12B

Matrix : Water

Lab Number : 50403-07

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | 4.4 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 97.2 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 107 | | % Recovery | EPA 8260B | 6/9/2006 |

Sample : MW-13A

Matrix : Water

Lab Number : 50403-08

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | 3.1 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 99.1 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 109 | | % Recovery | EPA 8260B | 6/9/2006 |

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 50403

Date : 6/14/2006

Project Name : Cash Oil Fortuna

Project Number : NC-4

Sample : MW-13B

Matrix : Water

Lab Number : 50403-09

Sample Date : 6/6/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | 17 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 98.1 | | % Recovery | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 107 | | % Recovery | EPA 8260B | 6/9/2006 |

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 50403

Date : 6/14/2006

QC Report : Method Blank Data

Project Name : Cash Oil Fortuna

Project Number : NC-4

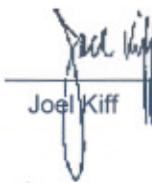
| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|-------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene - d8 (Surr) | 98.9 | % | | EPA 8260B | 6/8/2006 |
| 4-Bromofluorobenzene (Surr) | 106 | % | | EPA 8260B | 6/8/2006 |
| | | | | | |
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/9/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/9/2006 |
| Toluene - d8 (Surr) | 101 | % | | EPA 8260B | 6/9/2006 |
| 4-Bromofluorobenzene (Surr) | 99.4 | % | | EPA 8260B | 6/9/2006 |
| | | | | | |
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene - d8 (Sum) | 88.5 | % | | EPA 8260B | 6/8/2006 |
| 4-Bromofluorobenzene (Surr) | 118 | % | | EPA 8260B | 6/8/2006 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|-------|-----------------|---------------|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/8/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/8/2006 |
| Toluene - d8 (Surr) | 101 | % | | EPA 8260B | 6/8/2006 |
| 4-Bromofluorobenzene (Surr) | 100 | % | | EPA 8260B | 6/8/2006 |

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



Report Number : 50403

Date : 6/14/2006

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : Cash Oil Fortuna

Project Number : NC-4

| Parameter | Spiked Sample | Sample Value | Spike Level | Spike Dup. Level | Spiked Sample Value | Duplicate Spiked Sample Value | Units | Analysis Method | Date Analyzed | Spiked Sample Percent Recov. | Duplicate Spiked Sample Percent Recov. | Relative Percent Diff. | Spiked Sample Percent Recov. Limit | Relative Percent Diff. Limit |
|----------------------|---------------|--------------|-------------|------------------|---------------------|-------------------------------|-------|-----------------|---------------|------------------------------|--|------------------------|------------------------------------|------------------------------|
| Benzene | 50412-07 | <0.50 | 40.0 | 40.0 | 42.9 | 41.7 | ug/L | EPA 8260B | 6/8/06 | 107 | 104 | 2.78 | 70-130 | 25 |
| Toluene | 50412-07 | <0.50 | 40.0 | 40.0 | 41.5 | 40.5 | ug/L | EPA 8260B | 6/8/06 | 104 | 101 | 2.42 | 70-130 | 25 |
| Tert-Butanol | 50412-07 | <5.0 | 200 | 200 | 203 | 210 | ug/L | EPA 8260B | 6/8/06 | 102 | 105 | 3.51 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 50412-07 | <0.50 | 40.0 | 40.0 | 38.9 | 39.3 | ug/L | EPA 8260B | 6/8/06 | 97.2 | 98.2 | 1.07 | 70-130 | 25 |
| Benzene | 50425-04 | <0.50 | 40.0 | 40.0 | 41.6 | 38.2 | ug/L | EPA 8260B | 6/9/06 | 104 | 95.6 | 8.36 | 70-130 | 25 |
| Toluene | 50425-04 | <0.50 | 40.0 | 40.0 | 41.0 | 37.2 | ug/L | EPA 8260B | 6/9/06 | 102 | 92.9 | 9.81 | 70-130 | 25 |
| Tert-Butanol | 50425-04 | <5.0 | 200 | 200 | 195 | 186 | ug/L | EPA 8260B | 6/9/06 | 97.7 | 93.0 | 4.89 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 50425-04 | <0.50 | 40.0 | 40.0 | 36.1 | 33.6 | ug/L | EPA 8260B | 6/9/06 | 90.3 | 84.1 | 7.06 | 70-130 | 25 |
| Benzene | 50403-03 | 9.4 | 40.0 | 40.0 | 48.4 | 47.0 | ug/L | EPA 8260B | 6/8/06 | 97.7 | 94.0 | 3.81 | 70-130 | 25 |
| Toluene | 50403-03 | <0.50 | 40.0 | 40.0 | 40.0 | 38.5 | ug/L | EPA 8260B | 6/8/06 | 100 | 96.2 | 3.85 | 70-130 | 25 |
| Tert-Butanol | 50403-03 | <5.0 | 200 | 200 | 199 | 206 | ug/L | EPA 8260B | 6/8/06 | 99.6 | 103 | 3.40 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 50403-03 | 34 | 40.0 | 40.0 | 71.5 | 68.7 | ug/L | EPA 8260B | 6/8/06 | 94.5 | 87.5 | 7.68 | 70-130 | 25 |
| Benzene | 50420-02 | <0.50 | 40.0 | 40.0 | 41.0 | 40.5 | ug/L | EPA 8260B | 6/8/06 | 103 | 101 | 1.33 | 70-130 | 25 |
| Toluene | 50420-02 | <0.50 | 40.0 | 40.0 | 42.4 | 41.5 | ug/L | EPA 8260B | 6/8/06 | 106 | 104 | 2.06 | 70-130 | 25 |
| Tert-Butanol | 50420-02 | <5.0 | 200 | 200 | 206 | 211 | ug/L | EPA 8260B | 6/8/06 | 103 | 106 | 2.19 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 50420-02 | <0.50 | 40.0 | 40.0 | 40.4 | 41.2 | ug/L | EPA 8260B | 6/8/06 | 101 | 103 | 2.10 | 70-130 | 25 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Project Name : **Cash Oil Fortuna**Project Number : **NC-4**

| Parameter | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|----------------------|-------------|-------|-----------------|---------------|--------------------|--------------------------|
| Benzene | 40.0 | ug/L | EPA 8260B | 6/8/06 | 102 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 6/8/06 | 102 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 6/8/06 | 104 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 6/8/06 | 95.9 | 70-130 |
| | | | | | | |
| Benzene | 40.0 | ug/L | EPA 8260B | 6/9/06 | 99.0 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 6/9/06 | 96.8 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 6/9/06 | 99.1 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 6/9/06 | 92.9 | 70-130 |
| | | | | | | |
| Benzene | 40.0 | ug/L | EPA 8260B | 6/8/06 | 92.2 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 6/8/06 | 94.6 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 6/8/06 | 101 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 6/8/06 | 91.1 | 70-130 |
| | | | | | | |
| Benzene | 40.0 | ug/L | EPA 8260B | 6/8/06 | 102 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 6/8/06 | 104 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 6/8/06 | 102 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 6/8/06 | 100 | 70-130 |

KIFF ANALYTICAL, LLC

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Approved By:

Joe Kiff





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Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No.

50403

Page 1 of 1

Project Contact (Hardcopy or PDF To):

Scott Ferriman

California EDF Report?

Yes No

Chain-of-Custody Record and Analysis Request

| Project Contact (Hardcopy or PDF To): | | California EDF Report? | | Chain-of-Custody Record and Analysis Request | | | | | | | | | | | |
|---------------------------------------|---|------------------------|-------|--|------|--------------|--------|--------|------------------|------------------|-------|------|-----|---|--|
| Project Contact (Hardcopy or PDF To): | | California EDF Report? | | Chain-of-Custody Record and Analysis Request | | | | | | | | | | TAT | |
| Project Address: | | Sampling | | Container | | Preservative | | Matrix | | Analysis Request | | | | | |
| Sample Designation | | Date | Time | 40 ml VOA Sleeve | Poly | Glass | Tedlar | HCl | HNO ₃ | None | Water | Soil | Air | | |
| MW-16 | | 6/6/06 | 10:50 | 3 | | | | X | | | X | | | MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb | <input type="checkbox"/> |
| MW-9B | | | 11:10 | | | | | | | | | | | MTBE (EPA 8260B) @ 0.5 ppb | <input type="checkbox"/> |
| MW-9A | | | 11:30 | | | | | | | | | | | BTEX (EPA 8260B) | <input type="checkbox"/> |
| MW-10B | | | 11:50 | | | | | | | | | | | TPH Gas (EPA 8260B) | <input type="checkbox"/> |
| MW-10A | | | 12:10 | | | | | | | | | | | 5 Oxygenates (EPA 8260B) | <input type="checkbox"/> |
| MW-11B | | | 12:30 | | | | | | | | | | | 7 Oxigenates (EPA 8260B) | <input type="checkbox"/> |
| MW-12B | | | 12:50 | | | | | | | | | | | Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B) | <input type="checkbox"/> |
| MW-13A | | | 10:10 | | | | | | | | | | | Volatile Halocarbons (EPA 8260B) | <input type="checkbox"/> |
| MW-13B | ▼ | | 10:30 | ▼ | | | | ▼ | | | ▼ | | | Volatille Organics Full List (EPA 8260B) | <input type="checkbox"/> |
| | | | | | | | | | | | | | | Volatille Organics (EPA 524.2 Drinking Water) | <input type="checkbox"/> |
| | | | | | | | | | | | | | | TPH as Diesel (EPA 8015M) | <input type="checkbox"/> |
| | | | | | | | | | | | | | | TPH as Motor Oil (EPA 8015M) | <input type="checkbox"/> |
| | | | | | | | | | | | | | | Total Lead (EPA 6010) | <input type="checkbox"/> |
| | | | | | | | | | | | | | | W.E.T. Lead (STLC) | <input type="checkbox"/> |
| | | | | | | | | | | | | | | | <input checked="" type="checkbox"/> 1 wk |
| | | | | | | | | | | | | | | | <input type="checkbox"/> 12 hr |
| | | | | | | | | | | | | | | | <input type="checkbox"/> 24 hr |
| | | | | | | | | | | | | | | | <input type="checkbox"/> 48 hr |
| | | | | | | | | | | | | | | | <input type="checkbox"/> 72 hr |

| | | | | | | | | | |
|------------------------|--------|------|-------------------------|----------------------------------|------------|--------|------|-------------|---|
| Relinquished by: | Date | Time | Received by: | Remarks: | | | | | |
| <u>Jamie Linderman</u> | 6/6/06 | | FedEx | | | | | | |
| Relinquished by: | Date | Time | Received by: | Bill to: | | | | | |
| | | | | | | | | | |
| Relinquished by: | Date | Time | Received by Laboratory: | For Lab Use Only: Sample Receipt | | | | | |
| | 060706 | 1056 | <u>Laura Bellinger</u> | Kiff | Analytical | | | | |
| | | | | Temp °C | Initials | Date | Time | Therm. ID # | Coolant Present |
| | | | | 3.4 | ADG | 060706 | 1050 | JR-1 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |